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| APPLICATION NO.                             | FILING DATE '  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|----------------|----------------------|-------------------------|------------------|--|
| 09/364,432                                  | 07/30/1999     | WILLIAM M. NORR      | W.M.NORR1               | 9444             |  |
| 7:  | 590 04/24/2003 |                      |                         |                  |  |
| RYAN & MASON LLP                            |                |                      | EXAMINER                |                  |  |
| 90 ROREST AVENUE<br>LOCUST VALLEY, NY 11560 |                |                      | LEE, CHI CHUNG          |                  |  |
|   |                |                      | ART UNIT                | PAPER NUMBER     |  |
|   |                |                      | 2131                    | .7               |  |
|   |                |                      | DATE MAILED: 04/24/2003 | ,3 C             |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ,   | Application No.  | Applicant(s)  |  |  |  |  |
|---|--|---|--|--|--|--|
|   | 09/364,432   | NORR, WILLIAM M.  |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit  |  |  |  |  |
|   | Chi-Chung E Lee  | 2131  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS for cause the application to become ABANDO | e timely filed  days will be considered timely.  rom the mailing date of this communication.  DNED (35 U.S.C. § 133). |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>30 J</u>   | <u>luly 1999</u> .   |   |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th  | is action is non-final.  |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |  |   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-38</u> is/are pending in the application  | _  |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-4,7-18 and 2<b>∮</b>-38</u> is/are rejected.  |  |   |  |  |  |  |
| 7)⊠ Claim(s) <u>5,6,19 and 20</u> is/are objected to.   |  |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |  |   |  |  |  |  |
| Application Papers  |  |   |  |  |  |  |
| 9) The specification is objected to by the Examiner   | r.   |   |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>30 July 1999</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.   |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |   |  |  |  |  |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.  |  |   |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |  |   |  |  |  |  |
| 12) ☐ The oath or declaration is objected to by the Examiner.   |  |   |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |  |   |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |   |  |  |  |  |
| a) All b) Some * c) None of:  |  |   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |   |  |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |  |   |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |  |   |  |  |  |  |
| a) ☐ The translation of the foreign language pro- 15)☐ Acknowledgment is made of a claim for domestic   | • •  |   |  |  |  |  |
| Attachment(s)   |  |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.  | 5) Notice of Inform  | ary (PTO-413) Paper No(s) al Patent Application (PTO-152)   |  |  |  |  |

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#### **DETAILED ACTION**

## Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "252" has been used to designate both audio processor and Channel Stream Processor (SW) of figure 4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The applicant is responsible for making corrections on pages 8-9 related to one of the reference character "252". The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claim 1-4, 6-18, 21-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (US 5,751,806 A) and further in view of Cuccia (US 5,818,934 A) and Menezes et al.

Ryan is directed to a system and method of information dissemination that permits the user to listen to the specific content of information.

As per claim 15, Ryan discloses a transmitter 53 operative to transmit the broadcast signal to a receiver through antenna 54, see figure 2. The broadcast signal comprises an

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encrypted compressed digitized audio, which is inserted into the transmitter of an existing radio and television stations (i.e. partially-encrypted format); see column 7 lines 5-30. Ryan discloses the access to the information in the FM broadcast signal is provided near at the analog FM quality (i.e. a first quality level), see column 2 lines 1-22.

Ryan does not disclose expressly the communication system is using the multiple bitstreams encryption.

Cuccia is directed to a method and apparatus for providing a secure interface between a decryption engine and a system decoder of a digital television receiver.

Cuccia discloses the digital receiver includes a decryption engine 12 and system decoder 14. The communication via the 16-bit wide parallel buses 16,18. The bit order of the bits comprising the plain text bit-stream produced by the decryption engine 12 is scrambled by the plain text scramble module 26 of the decryption engine, see column 5 line 44 – column 6 line 62.

Ryan and Cuccia are analogous art because they are from same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use stream ciphers (i.e. bitstreams encryption). The motivation for doing so would have been the stream ciphers are advantageous because they have no error propagation and can be used when the data must be processed one symbol at a time,

see Menezes et al page 20.

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As per claim 16, Ryan discloses the FM analog signal of the audio signal is transmitted to the receiver without encryption. The FM analog signal output is provided near FM quality level (i.e. first quality level), see column 3 lines 1-15.

As per claim 17, Ryan discloses the conditional access circuit 16 ensures that the data is decrypted only if the proper key has been provided; see column 3 lines 22-34. Ryan discloses the audio data (i.e. digital decrypted audio) can be stored in the storage medium for 10 hours and access to the decrypted digitized audio data is provided at a CD quality level (i.e. a second quality level) higher than the FM quality level (i.e. the first quality level), see column 3 lines 35-45.

As per claims 18,38, Ryan discloses the decryption master key for each individual receiver is physically delivered to each user periodically; see column 6 lines 34-40. It would be obvious to one of ordinary skill in the art to supply the key by the network connection established with a server in order to purchase the digital encrypted audio through network and download the decryption key immediately.

As per claims 21-24, Ryan discloses the information delivered to the receiver comprises digital encrypted audio data (i.e. audio information); see column 3 lines 16-21. The FM analog signal output is provided near FM quality level (i.e. first quality level), see column 3 lines 1-15. Ryan discloses the audio data (i.e. digital decrypted audio) can be stored in

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the storage medium for 10 hours and access to the decrypted digitized audio data is provided near at a CD quality level (i.e. a second quality level), see column 3 lines 35-45.

As per claims 25, 26,27, 28, Ryan discloses the information in the received audio data is stored in the storage device accessible to the receiver; see column 3 lines 23-45. The storage memory may consist of a non-volatile storage medium, an optical mini-disk, and a magnetic disk, see column 3 lines 29-34.

As per claims 1-4, 7-14, 36, the claimed steps corresponds to the functions of the elements of the apparatus claims 15-18,21-28, 38, which has been rejected above, and thus rejected with the same reason applied thereto.

As per claims 31, 32, 34,37, Ryan discloses a apparatus for receiving information from transmitter comprising a receiver operative to receive the audio signal comprises an encrypted compressed digitized audio, which is inserted into the transmitter of an existing radio and television stations (i.e. partially-encrypted format); see column 7 lines 5-30. Ryan discloses the access to the information in the FM broadcast signal is provided at the analog FM quality (i.e. a first quality level); see column 2 lines 1-22. Ryan discloses the conditional access circuit 16 ensures that the data is decrypted only if the proper key has been provided; see column 3 lines 22-34. Ryan discloses the audio data (i.e. digital decrypted audio) can be stored in the storage medium for 10 hours and access to the decrypted digitized audio data is provided at a CD quality level (i.e. a second quality

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level) higher than the FM quality level (i.e. the first quality level), see column 3 lines 35-45.

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As per claims 29,30, 33, 35, the claimed steps corresponds to the functions of the elements of the apparatus claims 31, 32, 34,37, which has been rejected above, and thus rejected with the same reason applied thereto.

### Claim Objections

4. Claims 19-20, 5-6 objected to because of the following informalities: They depend on claims 15, 1, which have been rejected under 35 U.S.C. 103(a) above. Appropriate correction is required.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chi-Chung E Lee whose telephone number is 703-306-4153.

The examiner can normally be reached on 8 am - 5 pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail O Hayes can be reached on 703-305-9711. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Chi-Chung Lee April 13, 2003

GAIL HAYES

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